Food and Drug Administration Center for Drug Evaluation and Research

Summary Minutes of the Oncologic Drugs Advisory Committee April 12, 2016

Location: FDA White Oak Campus, Building 31, the Great Room, White Oak Conference Center (Rm. 1503), Silver Spring, Maryland

Topic: The committee met to discuss new drug application (NDA) 208542, rociletinib tablets, application submitted by Clovis Oncology, Inc. The proposed indication (use) for this product is for the treatment of patients with mutant epidermal growth factor receptor (EGFR) non-small cell lung cancer (NSCLC) who have been previously treated with an EGFR-targeted therapy and have the EGFR T790M mutation as detected by an FDA approved test.

These summary minutes for the April 12, 2016, meeting of the Oncologic Drugs Advisory Committee of the Food and Drug Administration were approved on June 13, 2016.

I certify that I attended the April 12, 2016, meeting of the Oncologic Drugs Advisory Committee of the Food and Drug Administration and that these minutes accurately reflect what transpired.

/S/
LCDR Jennifer Shepherd, RPh
Acting Designated Federal Officer, ODAC

/S/
Deborah K. Armstrong, MD
Chairperson, ODAC

Food and Drug Administration Center for Drug Evaluation and Research

Summary Minutes of the Oncologic Drugs Advisory Committee April 12, 2016

The following is the final report of the Oncologic Drugs Advisory Committee (ODAC) meeting held on April 12, 2016. A verbatim transcript will be available in approximately six weeks, sent to the Office of Hematology and Oncology Products and posted on the FDA website at: http://www.fda.gov/AdvisoryCommittees/CommitteesMeetingMaterials/Drugs/OncologicDrugsAdvisoryCommittee/ucm426351.htm

All external requests for the meeting transcript should be submitted to the CDER Freedom of Information Office.

The Oncologic Drugs Advisory Committee (ODAC) of the Food and Drug Administration, Center for Drug Evaluation and Research met on April 12, 2016 from 8:30 a.m. until 1:00 p.m. at the FDA White Oak Campus, Building 31, the Great Room, White Oak Conference Center (Rm. 1503), Silver Spring, Maryland. Prior to the meeting, members and temporary voting members were provided copies of the briefing materials from the FDA, and the Sponsor, Clovis Oncology, Inc. The meeting was called to order by Deborah Armstrong, MD, (Chairperson); the conflict of interest statement was read into the record by LCDR Jennifer Shepherd, RPh (Acting Designated Federal Officer). There were approximately 200 people in attendance. There were 7 Open Public Hearing speakers.

Issue: The committee met to discuss new drug application (NDA) 208542, rociletinib tablets, application submitted by Clovis Oncology, Inc. The proposed indication (use) for this product is for the treatment of patients with mutant epidermal growth factor receptor (EGFR) non-small cell lung cancer (NSCLC) who have been previously treated with an EGFR-targeted therapy and have the EGFR T790M mutation as detected by an FDA approved test.

Attendance:

ODAC Members Present (Voting): Deborah K. Armstrong, MD (*Chairperson*); Bernard F. Cole, PhD; Tito Fojo, MD, PhD; Michael E. Menefee, MD; Grzegorz S. Nowakowski, MD; Brian I. Rini, MD, FACP; Bruce J. Roth, MD

ODAC Members Present (Non-Voting): Phuong Khanh (P.K.) Morrow, MD, FACP (*Industry Representative*)

ODAC Members Not Present (Voting): Harold J. Burstein, MD, PhD; Louis F. Diehl, MD; Jeffrey E. Lancet, MD; Vassilliki A. Papadimitrakopoulou, MD; Albert S. Pappo, MD

Temporary Members (Voting): William Douglas Figg, Sr., PharmD, MBA; Terry Gillespie (*Patient Representative*); Donald E. Mager, PharmD, PhD; Michele Orza, ScD (*Consumer Representative*); Arun Rajan, MD; Eva Szabo, MD

FDA Participants (Non-Voting): Richard Pazdur, MD; Patricia Keegan, MD; Gideon Blumenthal, MD; 'Lola Fashoyin-Aje, MD, MPH; Chao Liu, PhD

Acting Designated Federal Officer (Non-Voting): LCDR Jennifer Shepherd, RPh

Open Public Hearing Speakers: Laura Gottschalk, PhD (National Center for Health Research); Glenda Pena; Celia Thomlinson; Anita Figueras; Alexander I. Spira, MD (Virginia Cancer Specialists Research Institute); Russell B. Pace, Jr.; Scot Caughran

The agenda proceeded as follows:

Call to Order and Introduction of **Deborah Armstrong, MD**

Committee Chairperson, ODAC

Conflict of Interest Statement LCDR Jennifer Shepherd, RPh

Acting Designated Federal Officer, ODAC

Opening Remarks Gideon Blumenthal, MD

Medical Team Leader

Thoracic/Head & Neck Cancer Team Division of Oncology Products 2 (DOP2) Office of Hematology and Oncology Products

(OHOP)

Office of New Drugs (OND), CDER, FDA

APPLICANT PRESENTATIONS Clovis Oncology, Inc.

Introduction Lindsey Rolfe, MBCHB, MRCP

Chief Medical Officer Clovis Oncology

Unmet Need in EGFR Mutant NSCLC **David Carbone, MD, PhD**

Professor, Internal Medicine Director, James Thoracic Center The Ohio State University

Efficacy Sergey Yurasov, MD, PhD

Senior Vice President Clinical Development Clovis Oncology

Safety and Dose Selection Lindsey Rolfe, MBCHB, MRCP

APPLICANT PRESENTATIONS (CONT.)

Clinical Perspective and Benefit-Risk

Ross Camidge, MD, PhD

Professor of Medicine/Oncology

Joyce Zeff Chair in Lung Cancer Research University of Colorado Cancer Center

FDA PRESENTATIONS

NDA 208542 - Rociletinib

'Lola Fashoyin-Aje, MD, MPH

Medical Officer

Thoracic/Head & Neck Cancer Team DOP2, OHOP, OND, CDER, FDA

Chao Liu, PhD

Pharmacometrics Reviewer Division of Pharmacometrics (DPM) Office of Clinical Pharmacology (OCP) Office of Translational Sciences (OTS)

CDER, FDA

Clarifying Questions to the Presenters

BREAK

Open Public Hearing

Questions to the Committee/Committee Discussion

ADJOURNMENT

Questions to the Committee:

1. DISCUSSION: Please discuss whether the benefit-risk profile of rociletinib is favorable in the proposed population.

Committee Discussion: Some committee members stated that the drug may have benefit in certain patients (those with predicted rapid or intermediate NAT2 phenotype) and the risks that have been identified (specifically QT prolongation and hyperglycemia) may be able to be managed; however, more study is needed to provide enough data to support the benefit-risk profile. One committee member expressed concern over the variable pharmacokinetics of the drug and that more study is needed to identify those patients at higher risk for adverse events. Please see the transcript for details of the committee discussion.

2. VOTE: Should the results of the randomized clinical trial (TIGER-3) be submitted before FDA makes a regulatory decision on this application?

YES: 12 NO: 1 ABSTAIN: 0 NO VOTING: 0

Committee Discussion: The majority of the committee voted that the results of the randomized clinical trial (TIGER-3) be submitted before FDA makes a regulatory decision on this application. However, several concerns were stated including the lack of power in the TIGER-3 study design to compare the two doses of rociletinib with regard to efficacy or safety concerns of QT prolongation and hyperglycemia, and that the current application failed to meet the requirement for accelerated approval by showing superiority to other currently available treatments for metastatic non-small cell lung cancer. Please see the transcript for details of the committee discussion.

The meeting was adjourned at approximately 12:35 p.m.